Hypothesis of Neutron Formation and Implications for the Creation of Stabilized Antimatter

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## Introduction

The relationship between gluons (more specifically, something I term gluon-streams) and neutrons is analogous to the relationship between neutrinos and electrons. Just as the proximity of a great many converging neutrinos leads to the creation of an electron, the proximity of protons to one another drives gluon streams (namely in the fusion process) and ultimately triggers neutron formation. Fusion reactions, I postulate, generate more energy than fission reactions because fission reactions only lead to the release of gluons insofar as protons approach other protons after the instant of fissioning.

## **Abstract**

In fusion, protons that do not already have associated neutrons remain in proximity for a protracted period of time (in relative terms.) A stream of gluons are conjured from the protons and this stream, consisting of thousands of gluons, unites at a point halfway between the position of the two fusing protons. This interaction of significant numbers of gluons is what leads to the initial formation of neutrons.

In the case of basic stellar fusion, hydrogen can fuse partially into H2 or H3 and can occasionally fully make the transition into helium.

This explains how neutrons are created in the first place. The transverse flow of twin gluon streams result in the formation of more "down" quarks than "up" and, as we already know, the proportion of the quark types within the neutron bestows its unique property of neutral electrical charge.

Taking into consideration that there are more than two types of quarks, it may be possible to generate more exotic forms of matter including antimatter and antimatter complexes. In fact, by understanding the basic facts of neutron formation, it may be possible to synthesize specialized particles.

In my publication of 26Dec2021, I detailed a process that I believe will work to enable the generation of odderons at will -- a process that depends upon the clockwise flow of single protons within a synchrotron moving at relativistic velocities through the center of a triangle formed by three protons that move at equally high speeds in the counter-clockwise direction. Where pairs of protons would ordinarily generate neutrons under these conditions, the dynamic interaction of three or more protons prevents the formation of "down quarks" and instead leads to the formation of odderons A.K.A "glueballs." Once formed, these glueballs serve as an excellent basis for fusion energy, as readers of my publications should already be aware.

If we could control the configuration of these swarms of protons with enough

precision (or even set up near-collision mechanisms of both particles and antiparticles in concert with one another,) we could create other exotic particle types. One such particle type would be matter-antimatter insulators.

Stabilized antimatter, not to be confused with the oft-rumored Majorana particle, would consist of a kernel of true antimatter in the form of a single anti-neutron shielded from normal matter by a number of non-reactive particles similar to neutrons that lack any true quarks and thus does not react with either matter nor antimatter explosively. The lack of any quark would by definition mean that a particle would lack cohesion and would cease to be a whole particle. These insulating neutrons would instead have what might be termed a series of "false quarks."

Each false neutron would consist of both a conventional quark and an antiquark for each of the two "down" quarks and the single "up" quark that would normally be found in a neutron. At the sub-atomic level, these particles would, rather than annihilate one another, modulate the way in which their field effects manifest. In the case of a false neutron, which I concede is purely theoretical, the up and down quarks would give the particle substance and would allow other particles to attach to it like any other neutron (protons and anti-neutrons would naturally adhere) while the presence of anti-quarks within the false neutrons would have the effect of preventing any reaction with either conventional or anti-matter.

One possible approach to generating these specialized false neutrons (matter/antimatter insulators) would be to collocate both protons and antiprotons traveling in opposing directions and calibrated for a near-miss, much as with the odderon generation mechanism. In this case, a proton and an antiproton would fly in formation through the synchrotron clockwise and a second pair consisting of a proton and an anti-proton would be calibrated to pass near the other pair except from the opposite direction. If calibrated correctly, there would be an instant when all four particles would be equidistant from one another and in that moment, there would be potential for both quarks and anti-quarks to occupy the same space and ultimately, to form the basis of the ideal encapsulation mechanism for anti-neutrons.

While purely theoretical, an anti-neutron flanked on all sides by false neutrons would be able to resist immediate detonation and could be deliberately triggered by a fission bomb. Such explosive force could prove useful only for the deflection of near-Earth objects that pose a threat to the planet.

## Conclusion

Understanding neutron formation will at minimum help to better understand how to further improve odderon synthesis and fusion power generation systems if nothing else.

Note: This author has since written about the true nature of anti-matter (26 June 2023) and has reached conclusions which, although they do not entirely rule out the possibility of creating an anti-matter insulator particle, make the plausibility of such a particle far less likely. If such a thing is possible, the insulator particle would need to have greater repulsive force to compensate

for the lesser repulsive force of the quarks in anti-matter which give rise to the tendency of the quark systems to destabilize in the first place.